EMERGENCY DEPARTMENT AND URGENT CARE VISITS FOR HEAT-RELATED ILLNESS IN VIRGINIA

July 16-22, 2019

Background
At the time of this report, the Virginia Department of Health (VDH) received data on visits to 85 acute care hospital emergency departments (EDs), 19 free-standing EDs, and 45 urgent care centers (UCCs) in Virginia for purposes of public health surveillance. This report characterizes ED and UCC visit trends for heat-related illness.

See page 3 for data sources and case definitions used in this report.

Data Summary
A total of 653 ED and UCC visits for heat-related illness occurred between July 16-22, with 7% admitted to the hospital and 1 suspected heat-related death. The graph below displays the daily number of heat-related visits in Virginia between July 1 and July 22, 2019.

![Graph showing the number of ED and UCC visits for heat-related illness in Virginia by discharge type (July 16-22, 2019)]

<table>
<thead>
<tr>
<th>Discharge Type</th>
<th>Number of Visits (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admitted</td>
<td>47 (7%)</td>
</tr>
<tr>
<td>Deceased</td>
<td>1 (0.15%)</td>
</tr>
<tr>
<td>Discharged to Home</td>
<td>502 (77%)</td>
</tr>
<tr>
<td>Not Reported</td>
<td>96 (15%)</td>
</tr>
</tbody>
</table>
Both males and females displayed a significant increase in heat-related visits but males accounted for 68% (N=444) of visits between July 16-22. The largest proportion of visits by age were among patients 20-29 years old (18%, N=116) followed by a similar occurrence among 30-39 (17%), 40-49 (17%), 50-59 (14%), and 60-69 year olds (15%). The graphs below show ED and UCC heat-related illness visits in Virginia by sex and age group.
The map below displays VDH Health Districts with significant increases in heat-related visits on July 16-22 compared to baseline levels. 31 VDH Health Districts (out of 35) experienced elevated levels for heat-related illness (red alerts: p-value < 0.01; yellow warning: p-value < 0.05).

Health Districts with elevated visits include: Alleghany, Alexandria, Arlington, Central Shenandoah, Central Virginia, Chesterfield, Chesapeake, Chickahominy, Crater, Eastern Shore, Fairfax, Hampton, Henrico, Lord Fairfax, Loudon, Mount Rogers, Norfolk, Peninsula, Piedmont, Pittsylvania-Danville, Portsmouth, Prince William, Rappahannock, Rappahannock Rapidan, Richmond City, Roanoake City, Thomas Jefferson, Three Rivers, Virginia Beach, West Piedmont, Western Tidewater

Data Sources
VDH analyzes chief complaints and discharge diagnoses of ED and UCC visits to identify and monitor issues of public health concern across Virginia. The chief complaint is a free-text field capturing the patient’s primary reason for seeking medical care as interpreted by the ED registration staff. The discharge diagnosis is a coded field that uses standardized values outlined by the International Classification of Diseases (ICD) 10th Revision and SNOMED Clinical Terms (CT) code sets. Readers are strongly encouraged to review syndromic surveillance data limitations when interpreting this report.

Case Definitions
ED and UCC visits for heat-related illness were identified based on the Heat-Related Illness Syndrome Query definition published by the Council of State and Territorial Epidemiologists (CSTE) using the following terms for Chief Complaint and Discharge Diagnosis: heat exhaustion; heat exposure; heat cramps; heat stroke; hyperthermia; ICD-10 codes: T67, X30.; and SNOMED CT codes: 95868006, 95867001.